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USPAT2  
NEWS 5 JAN 13 IPC 8 searching in IFIPAT, IFIUDB, and IFICDB  
NEWS 6 JAN 13 New IPC 8 SEARCH, DISPLAY, and SELECT enhancements added to  
INPADOC  
NEWS 7 JAN 17 Pre-1988 INPI data added to MARPAT  
NEWS 8 JAN 17 IPC 8 in the WPI family of databases including WPIFV  
NEWS 9 JAN 30 Saved answer limit increased  
NEWS 10 JAN 31 Monthly current-awareness alert (SDI) frequency  
added to TULSA  
NEWS 11 FEB 21 STN AnaVist, Version 1.1, lets you share your STN AnaVist  
visualization results  
NEWS 12 FEB 22 Status of current WO (PCT) information on STN  
NEWS 13 FEB 22 The IPC thesaurus added to additional patent databases on STN  
NEWS 14 FEB 22 Updates in EPFULL; IPC 8 enhancements added  
NEWS 15 FEB 27 New STN AnaVist pricing effective March 1, 2006  
NEWS 16 FEB 28 MEDLINE/LMEDLINE reload improves functionality  
NEWS 17 FEB 28 TOXCENTER reloaded with enhancements  
NEWS 18 FEB 28 REGISTRY/ZREGISTRY enhanced with more experimental spectral  
property data  
NEWS 19 MAR 01 INSPEC reloaded and enhanced  
NEWS 20 MAR 03 Updates in PATDPA; addition of IPC 8 data without attributes  
NEWS 21 MAR 08 X.25 communication option no longer available after June 2006  
  
NEWS EXPRESS FEBRUARY 15 CURRENT VERSION FOR WINDOWS IS V8.01a,  
CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),  
AND CURRENT DISCOVER FILE IS DATED 19 DECEMBER 2005.  
V8.0 AND V8.01 USERS CAN OBTAIN THE UPGRADE TO V8.01a AT  
<http://download.cas.org/express/v8.0-Discover/>  
  
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FILE 'HOME' ENTERED AT 07:47:12 ON 17 MAR 2006

=> index bioscience

FILE 'DRUGMONOG' ACCESS NOT AUTHORIZED

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, ANTE, AQUALINE, AQUASCI, BIOENG, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CAPLUS, CEABA-VTB, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DISSABS, DRUGB, DRUGMONOG2, DRUGU, EMBAL, EMBASE, ...' ENTERED AT 07:47:23 ON 17 MAR 2006

70 FILES IN THE FILE LIST IN STNINDEX

Enter SET DETAIL ON to see search term postings or to view search error messages that display as 0\* with SET DETAIL OFF.

=> s (polypodium) and (extract###)

3 FILE ADISNEWS  
8 FILE AGRICOLA  
1 FILE ANABSTR  
55 FILE BIOSIS  
6 FILE BIOTECHABS  
6 FILE BIOTECHDS  
10 FILE BIOTECHNO  
35 FILE CABA  
80 FILE CAPLUS  
1 FILE CONFSCI  
1 FILE CROPB  
5 FILE CROPU  
1 FILE DDFB  
26 FILE DDFU

23 FILES SEARCHED...

3 FILE DISSABS  
1 FILE DRUGB  
8 FILE DRUGMONOG2  
31 FILE DRUGU  
1 FILE EMBAL  
66 FILE EMBASE  
20 FILE ESBIOBASE  
2 FILE FROSTI  
2 FILE FSTA  
6 FILE IFIPAT  
6 FILE IMSPRODUCT  
3 FILE KOSMET  
3 FILE LIFESCI  
24 FILE MEDLINE

47 FILES SEARCHED...

25 FILE PASCAL  
1 FILE PROMT  
43 FILE SCISEARCH  
15 FILE TOXCENTER  
36 FILE USPATFULL  
2 FILE USPAT2  
24 FILE WPIDS

68 FILES SEARCHED...

24 FILE WPINDEX

36 FILES HAVE ONE OR MORE ANSWERS, 70 FILES SEARCHED IN STNINDEX

L1 QUE (POLYPODIUM). AND (EXTRACT###)

=> d rank

F1 80 CAPLUS

F2 66 EMBASE

F3	55	BIOSIS
F4	43	SCISEARCH
F5	36	USPATFULL
F6	35	CABA
F7	31	DRUGU
F8	26	DDFU
F9	25	PASCAL
F10	24	MEDLINE
F11	24	WPIDS
F12	24	WPINDEX
F13	20	ESBIOBASE
F14	15	TOXCENTER
F15	10	BIOTECHNO
F16	8	AGRICOLA
F17	8	DRUGMONOG2
F18	6	BIOTECHABS
F19	6	BIOTECHDS
F20	6	IFIPAT
F21	6	IMSPRODUCT
F22	5	CROPU
F23	3	ADISNEWS
F24	3	DISSABS
F25	3	KOSMET
F26	3	LIFESCI
F27	2	FROSTI
F28	2	FSTA
F29	2	USPAT2
F30	1	ANABSTR
F31	1	CONFSCI
F32	1	CROPB
F33	1	DDFB
F34	1	DRUGB
F35	1	EMBAL
F36	1	PROMT

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

1.22

1.43

FILE 'CAPLUS' ENTERED AT 07:48:46 ON 17 MAR 2006

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FILE LAST UPDATED: 16 Mar 2006 (20060316/ED)

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```

=> s (polypodium) and (extract###)
      272 POLYPODIUM
      249487 EXTRACT###
      303742 EXT
      222957 EXTS
      469821 EXT
            (EXT OR EXTS)
      351673 EXTD
            7 EXTDS
      351675 EXTD
            (EXTD OR EXTDS)
      54521 EXTG
            1 EXTGS
      54522 EXTG
            (EXTG OR EXTGS)
      390924 EXTN
      14030 EXTNS
      396438 EXTN
            (EXTN OR EXTNS)
      1063079 EXTRACT###
            (EXTRACT### OR EXT OR EXTD OR EXTG OR EXTN)
L2      80 (POLYPODIUM) AND (EXTRACT###)

=> dup rem
ENTER L# LIST OR (END):12
PROCESSING COMPLETED FOR L2
L3      80 DUP REM L2 (0 DUPLICATES REMOVED)

=> d scan

L3      80 ANSWERS  CAPLUS  COPYRIGHT 2006 ACS on STN
CC      11-1 (Plant Biochemistry)
TI      Triterpenoids from Polypodium decumanum
ST      Polypodium ferene acetoxypopane sitosterol antimalarial
        antibacterial
IT      Antibacterial agents
        Antimalarials
        Polypodium decumanum
        (fer-9(11)-ene and 29-acetoxypopane triterpenoids and  $\beta$ -sitosterol
        from Polypodium decumanum exts. and their
        antimalarial and antibacterial activities)
IT      83-46-5,  $\beta$  Sitosterol 1615-99-2, Fern-9(11)-ene 59169-24-3
        RL: NPO (Natural product occurrence); PAC (Pharmacological activity); BIOL
        (Biological study); OCCU (Occurrence)
        (fer-9(11)-ene and 29-acetoxypopane triterpenoids and  $\beta$ -sitosterol
        from Polypodium decumanum exts. and their
        antimalarial and antibacterial activities)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> s l2 and (rhizome)
      4519 RHIZOME
      4561 RHIZOMES
      7449 RHIZOME
            (RHIZOME OR RHIZOMES)
L4      18 L2 AND (RHIZOME)

=> d total ibib abs

L4      ANSWER 1 OF 18  CAPLUS  COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:      2003:984805  CAPLUS
TITLE:                  Novel therapeutic use of polypodium
                        extracts
INVENTOR(S):            Quintanilla, Almagro Eliseo
PATENT ASSIGNEE(S):     Especialidades Farmaceuticas Centrum, S.A., Spain;

```

SOURCE: Quintanilla Almagro, Eliseo  
PCT Int. Appl.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: Spanish  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003103695	A1	20031218	WO 2003-ES272	20030605
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
ES 2197018	A1	20031216	ES 2002-1345	20020606
ES 2197018	B1	20051001		
CA 2488356	AA	20031218	CA 2003-2488356	20030605
AU 2003240850	A1	20031222	AU 2003-240850	20030605
JP 2005528452	T2	20050922	JP 2004-510814	20030605
PRIORITY APPLN. INFO.:			ES 2002-1345	A 20020606
			WO 2003-ES272	W 20030605

AB The invention relates to a novel use of **extracts** of the genus **Polypodiaceae** for the treatment of fibrotic diseases, diseases caused by an overexpression of the components of the extracellular matrix or by an overexpression of Transforming Growth Factor (TFG-ss), e.g. scleroderma, pulmonary fibrosis, atherosclerosis, medullary fibrosis, hepatic fibrosis, pancreatic fibrosis, renal fibrosis, cardiac fibrosis, Dupuytren's disease and, in particular, Peyronie's disease. The invention also relates to the inhibition of the components of the extracellular matrix in vitro and the reduction of the fibrosis in the tunica albuginea of the penis and the size of the collagen plate in patients with Peyronie's disease using **Polypodium extracts**. In a preferred mode, the **Polypodium extracts** are obtained by **extraction** with a polar solvent from the **rhizomes** of **Polypodium leucotomos**.

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1998:371470 CAPLUS

DOCUMENT NUMBER: 129:140525

TITLE: Quantitative determination of antiinflammatory principles in some **Polypodium** species as a basis for standardization

AUTHOR(S): Liu, B.; Diaz, F.; Bohlin, L.; Vasaenge, M.

CORPORATE SOURCE: Div. Pharmacognosy, Dep. Pharmacy, Biomedical Center, Uppsala Univ., Uppsala, S-75123, Swed.

SOURCE: Phytomedicine (1998), 5(3), 187-194

CODEN: PYTOEY; ISSN: 0944-7113

PUBLISHER: Gustav Fischer Verlag

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Polyunsatd. fatty acids (linoleic, linolenic, arachidonic acid), the triflavonoid selliguaein, and a sulfonoglycolipid (SQDG) were determined quant. by high-performance liquid chromatog. in the leaves and **rhizomes** of 5 **Polypodium** species (Calaguala). **Exts.** of the 5 ferns were studied in 3 in vitro bioassays using platelet activating factor and leukotriene B4. SQDG was present in pharmacol. detectable

amts. in the crude **exts.** The anal. method for quant. determination of SQDG was recommended to be used for standardization of Calaguala **extract** in herbal drug prepsns.

L4 ANSWER 3 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1997:146151 CAPLUS  
DOCUMENT NUMBER: 126:198476  
TITLE: Effect of Anapsos (**Polypodium leucotomos extract**) on in vitro production of cytokines  
AUTHOR(S): Sempere, J. M.; Rodrigo, C.; Campos, A.; Villalba, J. F.; Diaz, J.  
CORPORATE SOURCE: Scientific Dept., ASAC Pharmaceutical International, Alicante, 03006, Spain  
SOURCE: British Journal of Clinical Pharmacology (1997), 43(1), 85-89  
CODEN: BCPHBM; ISSN: 0306-5251  
PUBLISHER: Blackwell  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB The aim of the study was to test the immunomodulating capacity of Anapsos, **Polypodium leucotomos extract**, in vitro to explore how this **extract** acts from an immunol. point of view and thus to identify a common link capable of explaining most of its effects. **Polypodium leucotomos rhizomes** were harvested in Guatemala and the **extract**, Anapsos, obtained. Mononuclear cells were obtained by d. gradient centrifugation from healthy donors, and stimulated with phytohemagglutinin or pokeweed with and without Anapsos and with Anapsos alone. Cell proliferation was determined by thymidine incorporation. Cells were also stimulated and the following cytokines determined by ELISA at 0, 12, 24, 48, 72, and 96 h: IL-1 $\beta$ , TNF- $\alpha$ , IL-2, IFN- $\gamma$ , IL-4 and IL-10. Anapsos, **Polypodium leucotomos extract**, has a modulating effect on the in vitro production and release of cytokines by peripheral blood mononuclear cells of healthy subjects. At doses effective in vivo, Anapsos can stimulate PBMC proliferation, delay IL-1 $\beta$  secretion and at the same time increase that of IL-2, IL-10, and IFN- $\gamma$ . Anapsos may have an antagonistic effect on some of the cytokines released on cell stimulation with LPS and/or PHA, which suggests that this product has a pleiotropic effect on different populations in the immune system.

L4 ANSWER 4 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1995:362977 CAPLUS  
DOCUMENT NUMBER: 122:155672  
TITLE: Analysis of crude **extracts** and fractions of Brazilian Polypodiaceae by high-resolution gas chromatography-mass spectrometry. I. Triterpenes  
AUTHOR(S): Patitucci, Maria Lucia; Pinto, Angelo, C.; Cardoso, Jari N.  
CORPORATE SOURCE: Instituto de Quimica, Universidade Federal do Rio de Janeiro, Rio de Janeiro, 21910-240, Brazil  
SOURCE: Phytochemical Analysis (1995), 6(1), 38-44  
CODEN: PHANEL; ISSN: 0958-0344  
PUBLISHER: Wiley  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB Characterization of individual components in plant **exts.** through classical phytochem. methods is a multi-step procedure which is both costly and time-consuming. Also significant amts. of **extract** are required and detection of minor compds. is frequently not possible. The method described in this work involves direct anal. of crude or prefractionated apolar or medium-polar **exts.** by high-resolution gas chromatog. and computerized high-resolution gas chromatog.-mass spectrometry, followed by co-injections of the crude **extract** with certified stds. on capillary columns of different polarities. The effectiveness of the method is illustrated for several species of Polypodiaceae (spores and **rhizomes**), allowing easy monitoring of compound-type distributions

(e.g. triterpenes) and detection of structures present at trace levels (for example, 22,29,30-trisnorhopane).

L4 ANSWER 5 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN

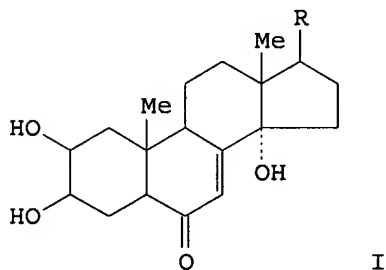
ACCESSION NUMBER: 1995:325005 CAPLUS  
DOCUMENT NUMBER: 123:199241  
TITLE: Synthesis and structure revision of intensely sweet saponin, osladin  
AUTHOR(S): Nishizawa, Mugio; Yamada, Hidetoshi  
CORPORATE SOURCE: Faculty Pharmaceutical Sciences, Tokushima Bunri University, Tokushima, 770, Japan  
SOURCE: Journal of the Indian Institute of Science (1994), 74(1), 169-79  
CODEN: JIISAD; ISSN: 0019-4964  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB The total synthesis of compound 10, which is the reported structure of intensely sweet saponin osladin, has been completed. However, it is not as sweet as suggested. Re-extraction of the sweet principle of **rhizomes** of the fern *Polypodium vulgare* (Polypodiaceae) and single crystal X-ray diffraction study revealed its real structure to be 27. We also found it to be only 500 times sweeter than sucrose as against 3,000 times suggested elsewhere. Therefore, the total synthesis of the real osladin was achieved from steroidal aldehyde 20 by using newly developed  $\beta$ -selective and 2' hydroxyl group-discriminated glucosylation procedure and our original  $\alpha$ -selective thermal rhamnosylation reaction. Synthetic osladin was also very sweet and thus we prove that osladin is the real sweet principle of the fern.

L4 ANSWER 6 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1987:572800 CAPLUS  
DOCUMENT NUMBER: 107:172800  
TITLE: Isolation of ecdysones from plants  
INVENTOR(S): Vargas Gonzalez, Jose  
PATENT ASSIGNEE(S): Spain  
SOURCE: Span., 19 pp.  
CODEN: SPXXAD  
DOCUMENT TYPE: Patent  
LANGUAGE: Spanish  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

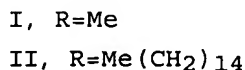
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
ES 547554	A1	19860316	ES 1985-547554	19851003
PRIORITY APPLN. INFO.: GI			ES 1985-547554	19851003



AB Ecdysones I (R = OH-substituted aliphatic radical) are extracted from leaves and **rhizomes** of *Polypodium leucotomos*, P. aureum, *Phebodium decumanum* and various conifer species. I have

L4 ANSWER 7 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1984:607744 CAPLUS  
DOCUMENT NUMBER: 101:207744  
TITLE: Chemotaxonomy of fern plants (I). **Polypodium**  
amamianum Tagawa  
AUTHOR(S): Ageta, Hiroyuki; Arai, Yoko  
CORPORATE SOURCE: Showa Coll. Pharm. Sci., Tokyo, 154, Japan  
SOURCE: Shoyakugaku Zasshi (1984), 38(1), 46-52  
CODEN: SHZAAY; ISSN: 0037-4377  
DOCUMENT TYPE: Journal  
LANGUAGE: Japanese

L4 ANSWER 8 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1979:416672 CAPLUS  
DOCUMENT NUMBER: 91:16672  
TITLE: Nonpolar pentacyclic triterpenes of the medicinal fern  
**Polypodium** subpetiolatum  
AUTHOR(S): Anderson, Chris; Fuller, Forrest; Epstein, W. W.  
CORPORATE SOURCE: Dep. Chem., Univ. Utah, Salt Lake City, UT, 84112, USA  
SOURCE: Journal of Natural Products (1979), 42(2), 168-73  
CODEN: JNPRDF; ISSN: 0163-3864  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
GI



AB The **rhizomes** of the medicinal Honduran fern *P. leucotomos*, commonly called "Calaguala", are claimed to exhibit antineoplastic activity. This prompted investigation of the nature of the compds. present in the **rhizomes** of the Guatamalan fern *P. subpetiolatum* because this plant is also used medicinally and is referred to by the same

common name "Calaguala". The isolation, characterization, and identification of the nonpolar fractions of a pentane extract of the **rhizomes** are described. The following pentacyclic triterpenes were characterized by chemical and phys. methods: 9(11)-fernene, 13(18)-neohopene, diploptene, 7-fernene, 17(21)-hopene, serratene, 3 $\beta$ -methoxy-9(11)-fernene, 3 $\beta$ -hydroxy-9(11)-fernene, 3 $\beta$ -acetoxy-9(115)-fernene (I), and fernenol palmitate (II). Neither I nor II have been previously isolated from natural sources.

L4 ANSWER 9 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1976:105835 CAPLUS  
DOCUMENT NUMBER: 84:105835  
TITLE: Structures of four new triterpenes from the  
**rhizomes of Polypodium**  
juglandifolium  
AUTHOR(S): Sunder, Ramadoss; Ayengar, K. N. Narayan; Rangaswami,  
Srinivasa  
CORPORATE SOURCE: Dep. Chem., Univ. Delhi, Delhi, India  
SOURCE: Journal of the Chemical Society, Perkin Transactions  
1: Organic and Bio-Organic Chemistry (1972-1999)  
(1976), (1), 117-21  
CODEN: JCPRB4; ISSN: 0300-922X  
DOCUMENT TYPE: Journal  
LANGUAGE: English

GI For diagram(s), see printed CA Issue.

AB The structures of the triterpenes I (R = OH, R1 = H; R = H, R1 = OH), II,  
and III, **extracted** from the **rhizomes** of P. juglandifolium,  
were determined from chemical and spectral data. The acetates of II and III  
also  
occurred in the same plant material.

L4 ANSWER 10 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1971:10541 CAPLUS  
DOCUMENT NUMBER: 74:10541  
TITLE: **Extraction** of ecdysterones from plant  
material  
INVENTOR(S): Jizba, Josef; Sorm, Frantisek; Herout, Vlastimil  
PATENT ASSIGNEE(S): Ceskoslovenska Akademie Ved  
SOURCE: U.S., 2 pp.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3527777	A	19700908	US 1968-710687	19680305
PRIORITY APPLN. INFO.:			US 1968-710687	A 19680305

GI For diagram(s), see printed CA Issue.

AB The insect hormones ecdysterone (I) and hydroxyecdysterone (II) were  
obtained from **rhizomes** of **Polypodium** vulgare by H2O or  
lower alc. **extraction** Chromatog. of defatted crude **extract** in  
H2O on polyamide gave a crystallization mixture of I and II which was applied  
in  
Me2CO to a SiO2 gel column and resolved by elution with CHCl3-MeOH (9:1).  
II, m. 244-6° (MeOH), is a new compound

L4 ANSWER 11 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1970:118226 CAPLUS  
DOCUMENT NUMBER: 72:118226  
TITLE: Insect molting hormones from **Polypodium**  
vulgare  
PATENT ASSIGNEE(S): Ceskoslovenska Akademie Ved  
SOURCE: Brit., 3 pp.

DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 1175483		19691223	GB	
CZ 137395			CZ	
DE 1643864			DE	
PRIORITY APPLN. INFO.:			CS	19670209

GI For diagram(s), see printed CA Issue.

AB Ecdysterone (Ia) and 5  $\beta$ -hydroxyecdysterone (Ib) were isolated. Thus dried and ground **rhizomes** of *P. vulgare* were exhaustively **extracted** with EtOH, the solvent evaporated under reduced pressure, and the residual syrup (92 g) diluted with 400 ml H<sub>2</sub>O. The resulting mixture was washed exhaustively with petroleum ether, the aqueous solution diluted with an equal volume of MeOH and **extracted** with 5-8 portions of an equal volume of n-BuOH or with 10 l. of CHCl<sub>3</sub>. The BuOH or CHCl<sub>3</sub> **extract** was evaporated to dryness and the residue chromatographed on a polyamide column with 500 ml fractions of H<sub>2</sub>O as eluent to give a mixture of Ia and Ib. The mixture (5.5 g) in Me<sub>2</sub>CO was chromatographed again on a column of silica gel (250 g, H<sub>2</sub>O content 15%) eluted with Me<sub>2</sub>CO or CHCl<sub>3</sub>-MeOH (9:1) to give 2 g Ia, m. 243-7° (Me<sub>2</sub>CO), Ia. 3H<sub>2</sub>O, m. 151° (H<sub>2</sub>O) and 0.37 g Ib, m. 244-6° (MeOH).

L4 ANSWER 12 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1967:479631 CAPLUS

DOCUMENT NUMBER: 67:79631

TITLE: Plant substances. XXVI. Isolation of constituents of common polypody **rhizomes**

AUTHOR(S): Jizba, Josef; Herout, Vlastimil

CORPORATE SOURCE: Ceskoslov. Akad. Ved., Prague, Czech.

SOURCE: Collection of Czechoslovak Chemical Communications (1967), 32(8), 2867-74  
CODEN: CCCCCA; ISSN: 0010-0765

DOCUMENT TYPE: Journal

LANGUAGE: English

AB cf. CA 64: 2455h. The following compds. were isolated from the hydrophilic part of the EtOH **extract** of the **rhizomes** of *Polypodium vulgare*: sucrose, polypodine A (I), m. 150-1°,  $[\alpha]_{20D} + 61.8^\circ$  (c 0.19, MeOH), polypodine B, m. 244-6°,  $[\alpha]_{20D} + 92.8^\circ$  (c 0.18, MeOH), glucocaffeic acid, m. 133-5°,  $[\alpha]_{20D} -80.4^\circ$ , polydine, m. 191-3°,  $[\alpha]_{20D} -121.6^\circ$  (c 0.24, MeOH), osladine, m. 201-3°, samambaine, m. 251-2°, and 2 saponins, m. 199-201° and 213-14°, resp. I is identical with crustecdysone (CA 67: 18149y). The lipophilic part of the **extract** contained fernene.

L4 ANSWER 13 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1967:52936 CAPLUS

DOCUMENT NUMBER: 66:52936

TITLE: Presence of glycyrrhizinic acid in **rhizomes** of *Polypodium vulgare* collected in Netherlands

AUTHOR(S): Van der Vijver, L. M.; Uffellie, O. F.

CORPORATE SOURCE: State Univ., Utrecht, Neth.

SOURCE: Pharmaceutisch Weekblad (1966), 101(51-52), 1137-9  
CODEN: PHWEAW; ISSN: 0031-6911

DOCUMENT TYPE: Journal

LANGUAGE: English

AB **Rhizomes** of the fern, *P. vulgare*, were gathered in the Netherlands during September. **Exts.** were made from fresh and

dried samples. Thin-layer chromatog. and spectrophotometry, failed to detect any glycyrrhizinic acid present in the precipitate from the exts

L4 ANSWER 14 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1966:75920 CAPLUS  
DOCUMENT NUMBER: 64:75920  
ORIGINAL REFERENCE NO.: 64:14228a-c  
TITLE: Triterpenoid epoxide from *Polypodium vulgare*  
AUTHOR(S): Berti, G.; Bottari, F.; Marsili, A.; Morelli, I.  
CORPORATE SOURCE: Univ. Pisa, Italy  
SOURCE: Tetrahedron Letters (1966), (9), 979-82  
CODEN: TELEAY; ISSN: 0040-4039  
DOCUMENT TYPE: Journal  
LANGUAGE: English

GI For diagram(s), see printed CA Issue.

AB cf. CA 62, 5135d. Chromatography of the nonsaponifiable fraction of the petr. ether **extract** from the dry **rhizomes** of *P. vulgare* on neutral Al<sub>2</sub>O<sub>3</sub> (activity II) and elution with petr. ether gave in succession 9(11)-farnene, 22-hopene, and a new compound (I), m. 268-70°, [ $\alpha$ ]<sub>D</sub> 28D 47° (CHCl<sub>3</sub>), no color with C(NO<sub>2</sub>)<sub>4</sub>, and no CO or OH bands in the ir spectrum. I treated with alc. HCl gave a heteroannular conjugated diene (II), m. 155-70°, [ $\alpha$ ]<sub>D</sub> 20D 80° (CHCl<sub>3</sub>). I was recovered unchanged after refluxing 6 hrs. with LiAlH<sub>4</sub> in Et<sub>2</sub>O. These data indicated the presence of an indented tetrasubstituted epoxide. II hydrogenated over Pt-C rapidly gave an alkene, changed more slowly to 17(21)-hopene (III), indicating the formulation of II as shown. III treated with p-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>CO<sub>3</sub>H in CHCl<sub>3</sub> yielded 80% I, tentatively considered as the  $\beta$ -epoxide. I treated with BF<sub>3</sub>-Et<sub>2</sub>O gave a different diene, m. 167-8°, [ $\alpha$ ]<sub>D</sub> 20D 51°, together with 10% of a ketone, m. 266-72° [ $\alpha$ ]<sub>D</sub> 20D 53°.

L4 ANSWER 15 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1965:29100 CAPLUS  
DOCUMENT NUMBER: 62:29100  
ORIGINAL REFERENCE NO.: 62:5135d-g  
TITLE: Cyclolanostanic triterpenes isolated from ferns  
AUTHOR(S): Berti, Giancarlo; Bottari, Francesco; Macchia, Bruno; Marsili, Antonio; Ourisson, Guy; Piotrowska, Hanna  
CORPORATE SOURCE: Inst. Chim., Strasbourg  
SOURCE: Bulletin de la Societe Chimique de France (1964), (9), 2359-60  
CODEN: BSCFAS; ISSN: 0037-8968  
DOCUMENT TYPE: Journal  
LANGUAGE: French

AB *Polypodium vulgare* roots (rhizoma), when **extracted** by petr. ether, yielded 10% oil, which was then treated with a NaOH-EtOH solution, giving 30% nonhydrolyzed residue. During chromatography of the residue on Al<sub>2</sub>O<sub>3</sub>, petr. ether eluted 12% of the hydrocarbons, mainly farnene; petr. ether-C<sub>6</sub>H<sub>6</sub> 47% of the unsatd. alcs. The rechromatography of the last fraction on Al<sub>2</sub>O<sub>3</sub> or better as acetates on SiO<sub>2</sub> followed by crystallization of their benzoates yielded 2 components: cyclolaudenol. (I), m. 123-5°, [ $\alpha$ ]<sub>D</sub> +45°, and its 4-methyl homolog (II), m. 139-40°, [ $\alpha$ ]<sub>D</sub> +44°, 3-acetate, m. 108-10°, 3-benzoate, m. 164-6°, [ $\alpha$ ]<sub>D</sub> +64° [ $\Delta$ <sub>E</sub>290 + 0.91], 3-keto derivs., m. 129-30°. Data for the corresponding derivs. of I are also given. By mass spectroscopy and elemental analysis, the compns. C<sub>31</sub>H<sub>52</sub>O for I and C<sub>30</sub>H<sub>50</sub>O for II were found. Addnl. data were obtained for both alcs. from ir and N.M.R. spectra relative to the appearance of isopropylene group. The reaction of the benzylidene derivative of II, m. 65-75°, with MeI and tert-BuOK, which yielded the benzylidene derivative of I, m. 110-25°, shows the absence of a Me group on C<sub>4</sub> in II in comparison with I. Besides I and II, 2 other unsatd. alcs. were found. The presence of cyclolaudenol in 2 other ferns

(*Ceterach officinarum* and *Phyllitis scolopendrium*) is announced. A plant material called balatol obtained by Cocker and Shaw CA 58, 6873c was also examined and found to be mainly a mixture of I and II.

L4 ANSWER 16 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1934:23731 CAPLUS  
DOCUMENT NUMBER: 28:23731  
ORIGINAL REFERENCE NO.: 28:2847b-f  
TITLE: Licorice fern and wild licorice as substitutes for licorice  
AUTHOR(S): Fischer, Louis; Lynn, E. V.  
SOURCE: Journal of the American Pharmaceutical Association (1912-1977) (1933), 22, 1225-30  
CODEN: JPHAA3; ISSN: 0003-0465  
DOCUMENT TYPE: Journal  
LANGUAGE: Unavailable

AB This is a continuation of studies on licorice fern *Polypodium vulgare* L. var. *occidentalis* Hoak. (C. A. 25, 4087) and a new study of wild licorice *Glycyrrhiza lepidota* (Nutt) Pursh. Material was identified by G. N. Jones. Licorice fern *rhizomes* (A) and leaves (B) were collected near Seattle, Wash. and wild licorice *rhizome* (C) near The Dalles, O. in June, 1929. Loss in air was (A) 75.6, (B) 74.4 and (C) 59.0%. Loss at 110° was (A) 79.2, (B) 77.1 and (C) 59.9%. The cleaned and air-dried material was used. Total ash was (A) 2.7, (B) 6.2 and (C) 5.2%. Acid-insol. ash was (A) 0.27, (B) 0.08 and (C) 0.55%. Et2O-soluble **extract** was (A) 7.3 and (C) 1.67%. CHCl3-soluble **extract** was (A) 7.7 and (C) 1.75%. EtOAc-soluble **extract** was (A) 15.6 and (C) 3.7%. EtOH-soluble **extract** was (A) 35.8 and (C) 14.3%. H2O-soluble **extract** was (A) 41.2 and (C) 27.9%. Reducing sugars were (A) 4.2, (B) 17.0 and (C) 2.3%. Sucrose was (A) 15.5, (B) 0.66 and (C) 3.64%. Starch was (A) 6.3 and (C) 3.5%. Pentosans (A. O. A. C.) were (A) 7.75 and (C) 14.6%. N + 6.25 was (A) 9%. Tannin was (A) 2.5%. Alkaloids were absent in each. Glycyrrhizin, Housemann's method (C. A. 15, 2959) (real licorice), was 7.89 and (C) 8.39%. The residues from (A) and (C) were not sweet. The Tschirch and Cedarberg method gave the characteristic sweet acid from genuine licorice but not for (A) and (C). Hence it was concluded that neither of the plants contained genuine glycyrrhizin. Benzoic and salicylic acids were obtained from (B); also a phytosterol m. 132-3° and an unidentified substance m. 74°. A new glucoside polydin was isolated from (A). It had no effect when fed to a rat. If previously **extracted** with CHCl3 prepns. of (A) might be used in medicine in place of genuine licorice. Licorice fern may be cultivated.

L4 ANSWER 17 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1931:36351 CAPLUS  
DOCUMENT NUMBER: 25:36351  
ORIGINAL REFERENCE NO.: 25:4087i,4088a-b  
TITLE: *Polypodium occidentale*  
AUTHOR(S): Fischer, Louis J.; Goodrich, F. J.  
SOURCE: Journal of the American Pharmaceutical Association (1912-1977) (1930), 19, 1063-71  
CODEN: JPHAA3; ISSN: 0003-0465  
DOCUMENT TYPE: Journal  
LANGUAGE: Unavailable

AB The licorice fern, *Polypodium occidentale*, is abundant along the northwest American coast from California to Alaska. The *rhizomes* were collected during 1927 and 1928 and dried at 75°. They were then ground and tested by the A. O. A. C. methods: loss in air 75.44-75.81, loss at 110° 3.48-3.60, total volatile matter 78.92-79.41, ash 2.68-2.69, acid-insol. ash 0.26-0.28 and water-insol. ash 2.06-2.09%. The drug was **extracted** with various organic solvents and the results recorded. The amount **extracted** by water was 41.34-41.04%. Glucose or levulose and starch were present. The amount of pentosans was 6.39-6.05, of tannins 3.45-3.89 and of volatile oil 0.0005% by steam

distillation The coloring matter was isolated. It dyed silk a fast pale yellow but had no effect on cotton or wool. Glycyrrhizin was present to the extent of 2.36% (on dried **rhizome**). Ammoniated glycyrrhizin was prepared; its chemical reactions agreed with those of the same product from glycyrrhiza but its color and taste were not identical. Various pharmaceutical preps. were made and compared with the analogous preparation from licorice. These preps. were not the equal of the official preparation; most of them had a bitter taste. The **rhizome** contains a starch-splitting enzyme. A fluidext. of the **rhizome** was not toxic to rats.

L4 ANSWER 18 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1925:17435 CAPLUS  
 DOCUMENT NUMBER: 19:17435  
 ORIGINAL REFERENCE NO.: 19:2259e-g  
 TITLE: **Polypodium** vulgare, L  
 AUTHOR(S): Volmar, J.; Reeb, E.  
 SOURCE: Journal de Pharmacie d'Alsace et de Lorraine (1924),  
 51, 190-3  
 CODEN: JPHLA2  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Unavailable  
 AB The **rhizome** of **Polypodium** owes its cholagog action (Leclerc, L'Union pharm. 1921, 137) to a glucoside, polypodin. From 500 g. of **rhizome** remove glycyrrhizin (A) by cold aqueous maceration for 48 hrs., then boil with 1 l. H2O for 1 hr., cool, filter and evaporate to 500 cc., precipitate the remainder of A with 1: 5 H2SO4, again filter, saturate with NH4-OH and evaporate to dryness. Take up with 150 cc. of H2O, add 100 g. (NH4)2SO4 and warm to complete solution of the salt; filter the precipitate formed, wash it with a cold saturated solution of the salt, and **extract** with EtOH. Evaporate the alc. solution to dryness, and treat with H2O. An insol. brown resin is left, soluble in dilute alkali. Treat the aqueous solution with Pb(AcO)2, remove Pb with H2S, expose to air for 48 hrs., filter and evaporate to crystallization  
 Polypodin forms yellowish plates, m. 151°-152°, soluble in H2O and organic solvents. It is a bitter, sapogenetic glucoside, free from N. Several color tests are given.

=> file stn guide

'STN' IS AN AMBIGUOUS FILE NAME

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STNMAIL - STN Electronic Mail Service

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 accessing the remaining files of your multiple file entry.

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MULTIFILE PROCESSING IS NOT ALLOWED IN FILE 'STNGUIDE'

The file entered is not valid in multifile processing. Enter "HELP  
 DFILES" to see a list of the valid files.

ENTER A FILE NAME OR (IGNORE):ignore

'GUIDE' IS NOT A VALID FILE NAME

SESSION CONTINUES IN FILE 'CAPLUS'

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 that are available. If you have requested multiple files, you can  
 specify a corrected file name or you can enter "IGNORE" to continue  
 accessing the remaining file names entered.

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COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
58.39	59.82

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-13.50	-13.50

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LOGINID:ssptamxa1655

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SESSION RESUMED IN FILE 'CAPLUS' AT 08:07:34 ON 17 MAR 2006  
FILE 'CAPLUS' ENTERED AT 08:07:34 ON 17 MAR 2006  
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COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	58.39	59.82

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-13.50	-13.50

=> d his

(FILE 'HOME' ENTERED AT 07:47:12 ON 17 MAR 2006)

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, ANTE, AQUALINE, AQUASCI, BIOENG, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CAPLUS, CEABA-VTB, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DISSABS, DRUGB, DRUGMONOG2, DRUGU, EMBAL, EMBASE, ...' ENTERED AT 07:47:23 ON 17 MAR 2006  
SEA (POLYPODIUM) AND (EXTRACT###)

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3  FILE ADISNEWS
8  FILE AGRICOLA
1  FILE ANABSTR
55 FILE BIOSIS
6  FILE BIOTECHABS
6  FILE BIOTECHDS
10 FILE BIOTECHNO
35 FILE CABA
80 FILE CAPLUS
1  FILE CONFSCI
1  FILE CROPB
5  FILE CROPU
1  FILE DDFB
26 FILE DDFU
3  FILE DISSABS
1  FILE DRUGB
8  FILE DRUGMONOG2
31 FILE DRUGU
1  FILE EMBAL
66 FILE EMBASE
20 FILE ESBIOWASE
2  FILE FROSTI
2  FILE FSTA
6  FILE IFIPAT

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6 FILE IMSPRODUCT  
 3 FILE KOSMET  
 3 FILE LIFESCI  
 24 FILE MEDLINE  
 25 FILE PASCAL  
 1 FILE PROMT  
 43 FILE SCISEARCH  
 15 FILE TOXCENTER  
 36 FILE USPATFULL  
 2 FILE USPAT2  
 24 FILE WPIDS  
 24 FILE WPINDEX

L1 QUE (POLYPODIUM) AND (EXTRACT###)  
 -----

FILE 'CAPLUS' ENTERED AT 07:48:46 ON 17 MAR 2006

L2 80 S (POLYPODIUM) AND (EXTRACT###)  
 L3 80 DUP REM L2 (0 DUPLICATES REMOVED)  
 L4 18 S L2 AND (RHIZOME)

=> d l4 abs

L4 ANSWER 1 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN  
 AB The invention relates to a novel use of **extracts** of the genus **Polypodiaceae** for the treatment of fibrotic diseases, diseases caused by an overexpression of the components of the extracellular matrix or by an overexpression of Transforming Growth Factor (TFG-ss), e.g. scleroderma, pulmonary fibrosis, atherosclerosis, medullary fibrosis, hepatic fibrosis, pancreatic fibrosis, renal fibrosis, cardiac fibrosis, Dupuytren's disease and, in particular, Peyronie's disease. The invention also relates to the inhibition of the components of the extracellular matrix in vitro and the reduction of the fibrosis in the tunica albuginea of the penis and the size of the collagen plate in patients with Peyronie's disease using **Polypodium extracts**. In a preferred mode, the **Polypodium extracts** are obtained by **extraction** with a polar solvent from the **rhizomes** of **Polypodium leucotomos**.

=> d total ibib abs

L4 ANSWER 1 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2003:984805 CAPLUS  
 TITLE: Novel therapeutic use of **polypodium extracts**  
 INVENTOR(S): Quintanilla, Almagro Eliseo  
 PATENT ASSIGNEE(S): Especialidades Farmaceuticas Centrum, S.A., Spain;  
 Quintanilla Almagro, Eliseo  
 SOURCE: PCT Int. Appl.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Spanish  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003103695	A1	20031218	WO 2003-ES272	20030605
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,			

KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,  
FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,  
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

ES 2197018	A1	20031216	ES 2002-1345	20020606
ES 2197018	B1	20051001		
CA 2488356	AA	20031218	CA 2003-2488356	20030605
AU 2003240850	A1	20031222	AU 2003-240850	20030605
JP 2005528452	T2	20050922	JP 2004-510814	20030605

PRIORITY APPLN. INFO.:

ES 2002-1345	A	20020606
WO 2003-ES272	W	20030605

AB The invention relates to a novel use of **extracts** of the genus **Polypodiaceae** for the treatment of fibrotic diseases, diseases caused by an overexpression of the components of the extracellular matrix or by an overexpression of Transforming Growth Factor (TFG-ss), e.g. scleroderma, pulmonary fibrosis, atherosclerosis, medullary fibrosis, hepatic fibrosis, pancreatic fibrosis, renal fibrosis, cardiac fibrosis, Dupuytren's disease and, in particular, Peyronie's disease. The invention also relates to the inhibition of the components of the extracellular matrix in vitro and the reduction of the fibrosis in the tunica albuginea of the penis and the size of the collagen plate in patients with Peyronie's disease using **Polypodium extracts**. In a preferred mode, the **Polypodium extracts** are obtained by **extraction** with a polar solvent from the **rhizomes** of **Polypodium leucotomos**.

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1998:371470 CAPLUS

DOCUMENT NUMBER: 129:140525

TITLE: Quantitative determination of antiinflammatory principles in some **Polypodium** species as a basis for standardization

AUTHOR(S): Liu, B.; Diaz, F.; Bohlin, L.; Vasaenge, M.

CORPORATE SOURCE: Div. Pharmacognosy, Dep. Pharmacy, Biomedical Center, Uppsala Univ., Uppsala, S-75123, Swed.

SOURCE: Phytomedicine (1998), 5(3), 187-194

CODEN: PYTOEY; ISSN: 0944-7113

PUBLISHER: Gustav Fischer Verlag

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Polyunsatd. fatty acids (linoleic, linolenic, arachidonic acid), the triflavonoid selliguelin, and a sulfonoglycolipid (SQDG) were determined quant. by high-performance liquid chromatog. in the leaves and **rhizomes** of 5 **Polypodium** species (Calaguala). **Exts.** of the 5 ferns were studied in 3 in vitro bioassays using platelet activating factor and leukotriene B4. SQDG was present in pharmacol. detectable amts. in the crude **exts.** The anal. method for quant. determination of SQDG was recommended to be used for standardization of Calaguala **extract** in herbal drug preps.

L4 ANSWER 3 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1997:146151 CAPLUS

DOCUMENT NUMBER: 126:198476

TITLE: Effect of Anapsos (**Polypodium leucotomos extract**) on in vitro production of cytokines

AUTHOR(S): Sempere, J. M.; Rodrigo, C.; Campos, A.; Villalba, J. F.; Diaz, J.

CORPORATE SOURCE: Scientific Dept., ASAC Pharmaceutical International, Alicante, 03006, Spain

SOURCE: British Journal of Clinical Pharmacology (1997), 43(1), 85-89

CODEN: BCPHBM; ISSN: 0306-5251

PUBLISHER: Blackwell

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The aim of the study was to test the immunomodulating capacity of Anapsos, **Polypodium leucotomos extract**, in vitro to explore how this **extract** acts from an immunol. point of view and thus to identify a common link capable of explaining most of its effects. **Polypodium leucotomos rhizomes** were harvested in Guatemala and the **extract**, Anapsos, obtained. Mononuclear cells were obtained by d. gradient centrifugation from healthy donors, and stimulated with phytohemagglutinin or pokeweed with and without Anapsos and with Anapsos alone. Cell proliferation was determined by thymidine incorporation. Cells were also stimulated and the following cytokines determined by ELISA at 0, 12, 24, 48, 72, and 96 h: IL-1 $\beta$ , TNF- $\alpha$ , IL-2, IFN- $\gamma$ , IL-4 and IL-10. Anapsos, **Polypodium leucotomos extract**, has a modulating effect on the in vitro production and release of cytokines by peripheral blood mononuclear cells of healthy subjects. At doses effective in vivo, Anapsos can stimulate PBMC proliferation, delay IL-1 $\beta$  secretion and at the same time increase that of IL-2, IL-10, and IFN- $\gamma$ . Anapsos may have an antagonistic effect on some of the cytokines released on cell stimulation with LPS and/or PHA, which suggests that this product has a pleiotropic effect on different populations in the immune system.

L4 ANSWER 4 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1995:362977 CAPLUS

DOCUMENT NUMBER: 122:155672

TITLE: Analysis of crude **extracts** and fractions of Brazilian Polypodiaceae by high-resolution gas chromatography-mass spectrometry. I. Triterpenes  
AUTHOR(S): Patitucci, Maria Lucia; Pinto, Angelo, C.; Cardoso, Jari N.

CORPORATE SOURCE: Instituto de Quimica, Universidade Federal do Rio de Janeiro, Rio de Janeiro, 21910-240, Brazil

SOURCE: Phytochemical Analysis (1995), 6(1), 38-44  
CODEN: PHANEL; ISSN: 0958-0344

PUBLISHER: Wiley

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Characterization of individual components in plant **exts.** through classical phytochem. methods is a multi-step procedure which is both costly and time-consuming. Also significant amts. of **extract** are required and detection of minor compds. is frequently not possible. The method described in this work involves direct anal. of crude or prefractionated apolar or medium-polar **exts.** by high-resolution gas chromatog. and computerized high-resolution gas chromatog.-mass spectrometry, followed by co-injections of the crude **extract** with certified stds. on capillary columns of different polarities. The effectiveness of the method is illustrated for several species of Polypodiaceae (spores and **rhizomes**), allowing easy monitoring of compound-type distributions (e.g. triterpenes) and detection of structures present at trace levels (for example, 22,29,30-trisnorhopane).

L4 ANSWER 5 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1995:325005 CAPLUS

DOCUMENT NUMBER: 123:199241

TITLE: Synthesis and structure revision of intensely sweet saponin, osladin

AUTHOR(S): Nishizawa, Mugio; Yamada, Hidetoshi

CORPORATE SOURCE: Faculty Pharmaceutical Sciences, Tokushima Bunri University, Tokushima, 770, Japan

SOURCE: Journal of the Indian Institute of Science (1994), 74(1), 169-79  
CODEN: JIISAD; ISSN: 0019-4964

DOCUMENT TYPE: Journal

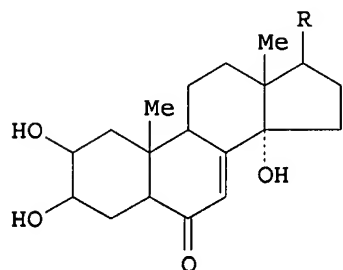
LANGUAGE: English

AB The total synthesis of compound 10, which is the reported structure of intensely sweet saponin osladin, has been completed. However, it is not

as sweet as suggested. Re-extraction of the sweet principle of **rhizomes** of the fern *Polypodium vulgare* (Polypodiaceae) and single crystal X-ray diffraction study revealed its real structure to be 27. We also found it to be only 500 times sweeter than sucrose as against 3,000 times suggested elsewhere. Therefore, the total synthesis of the real osladin was achieved from steroidal aldehyde 20 by using newly developed  $\beta$ -selective and 2' hydroxyl group-discriminated glucosylation procedure and our original  $\alpha$ -selective thermal rhamnosylation reaction. Synthetic osladin was also very sweet and thus we prove that osladin is the real sweet principle of the fern.

L4 ANSWER 6 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1987:572800 CAPLUS  
 DOCUMENT NUMBER: 107:172800  
 TITLE: Isolation of ecdysones from plants  
 INVENTOR(S): Vargas Gonzalez, Jose  
 PATENT ASSIGNEE(S): Spain  
 SOURCE: Span., 19 pp.  
 CODEN: SPXXAD  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Spanish  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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ES 547554	A1	19860316	ES 1985-547554	19851003
PRIORITY APPLN. INFO.: GI			ES 1985-547554	19851003

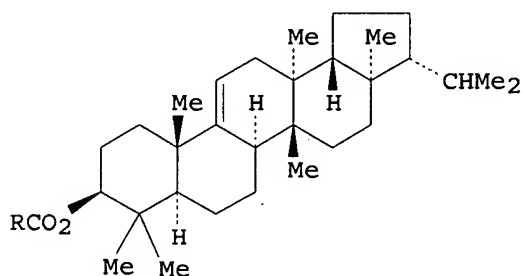


AB Ecdysones I (R = OH-substituted aliphatic radical) are **extracted** from leaves and **rhizomes** of *Polypodium leucotomos*, P. aureum, *Phebodium decumanum* and various conifer species. I have immunosuppressant and antiviral activity. Thus, dried powders of any of the above species were **extracted** with boiling EtOH. The EtOH was evaporated and the residue was partitioned in a hexane-water system (10:4) in order to sep. the liposol. compds. Reverse-phase chromatog. on Amberlite XAP, followed by elution with MeOH gave I. Oral doses of 120 mg I every 8 h, for 10 days, were effective for the treatment of herpes zoster.

L4 ANSWER 7 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1984:607744 CAPLUS  
 DOCUMENT NUMBER: 101:207744  
 TITLE: Chemotaxonomy of fern plants (I). *Polypodium amamianum* Tagawa  
 AUTHOR(S): Ageta, Hiroyuki; Arai, Yoko  
 CORPORATE SOURCE: Showa Coll. Pharm. Sci., Tokyo, 154, Japan  
 SOURCE: Shoyakugaku Zasshi (1984), 38(1), 46-52  
 CODEN: SHZAAY; ISSN: 0037-4377  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Japanese

AB **Rhizome** of *P. amamianum* contained fern-7-ene, hop-22(29)-ene, olean-18-ene, olean-12-ene, taraxer-14-ene, multiflor-8-ene, multiflor-7-ene, friedel-3-ene, 22-acetoxypentacyclic, germanicacyl acetate, cycloecalenyl acetate, cyclolaudenyl acetate, cyclomargenyl acetate, 7 $\alpha$ -hydroxytaraxer-14-ene, 17 $\alpha$ H-trisnorhopan-21-one, 2-oxofriedel-3-ene, cyclolaudenone and cyclomargenone. They were either individually isolated or identified in the **extract** by gas chromatog.-mass spectra and <sup>1</sup>H NMR. Some of these compds., especially triterpenoids of oleanane or migrated oleanane series contained in *P. amamianum* suggest close taxonomic relationship between this fern and *P. niponicum* and *P. formosanum*. From leaves of the fern, *P. amamianum*, 2 new diterpenoids, (13R)-13,14-dihydroxyalepterolic acid and its acetate were isolated and identified. Since these are only in *P. amamianum*, they may provide a useful means for the taxonomic identification of this fern.

L4 ANSWER 8 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1979:416672 CAPLUS  
 DOCUMENT NUMBER: 91:16672  
 TITLE: Nonpolar pentacyclic triterpenes of the medicinal fern *Polypodium subpetiolatum*  
 AUTHOR(S): Anderson, Chris; Fuller, Forrest; Epstein, W. W.  
 CORPORATE SOURCE: Dep. Chem., Univ. Utah, Salt Lake City, UT, 84112, USA  
 SOURCE: Journal of Natural Products (1979), 42(2), 168-73  
 CODEN: JNPRDF; ISSN: 0163-3864  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI



I, R=Me  
 II, R=Me(CH<sub>2</sub>)<sub>14</sub>

AB The **rhizomes** of the medicinal Honduran fern *P. leucotomos*, commonly called "Calaguala", are claimed to exhibit antineoplastic activity. This prompted investigation of the nature of the compds. present in the **rhizomes** of the Guatemalan fern *P. subpetiolatum* because this plant is also used medicinally and is referred to by the same common name "Calaguala". The isolation, characterization, and identification of the nonpolar fractions of a pentane **extract** of the **rhizomes** are described. The following pentacyclic triterpenes were characterized by chemical and phys. methods: 9(11)-fernene, 13(18)-neohopene, diploptene, 7-fernene, 17(21)-hopene, serratene, 3 $\beta$ -methoxy-9(11)-fernene, 3 $\beta$ -hydroxy-9(11)-fernene, 3 $\beta$ -acetoxy-9(115)-fernene (I), and fernenol palmitate (II). Neither I nor II have been previously isolated from natural sources.

L4 ANSWER 9 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1976:105835 CAPLUS  
 DOCUMENT NUMBER: 84:105835  
 TITLE: Structures of four new triterpenes from the **rhizomes** of *Polypodium juglandifolium*  
 AUTHOR(S): Sunder, Ramadoss; Ayengar, K. N. Narayan; Rangaswami, Srinivasa  
 CORPORATE SOURCE: Dep. Chem., Univ. Delhi, Delhi, India

SOURCE: Journal of the Chemical Society, Perkin Transactions  
1: Organic and Bio-Organic Chemistry (1972-1999)  
(1976), (1), 117-21  
CODEN: JCPRB4; ISSN: 0300-922X

DOCUMENT TYPE: Journal

LANGUAGE: English

GI For diagram(s), see printed CA Issue.

AB The structures of the triterpenes I (R = OH, R1 = H; R = H, R1 = OH), II, and III, **extracted** from the **rhizomes** of *P. juglandifolium*, were determined from chemical and spectral data. The acetates of II and III also occurred in the same plant material.

L4 ANSWER 10 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1971:10541 CAPLUS

DOCUMENT NUMBER: 74:10541

TITLE: **Extraction** of ecdysterones from plant material

INVENTOR(S): Jizba, Josef; Sorm, Frantisek; Herout, Vlastimil

PATENT ASSIGNEE(S): Ceskoslovenska Akademie Ved

SOURCE: U.S., 2 pp.  
CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3527777	A	19700908	US 1968-710687	19680305
PRIORITY APPLN. INFO.:			US 1968-710687	A 19680305

GI For diagram(s), see printed CA Issue.

AB The insect hormones ecdysterone (I) and hydroxyecdysterone (II) were obtained from **rhizomes** of *Polypodium* vulgare by H2O or lower alc. **extraction** Chromatog. of defatted crude **extract** in H2O on polyamide gave a crystallization mixture of I and II which was applied in Me2CO to a SiO2 gel column and resolved by elution with CHCl3-MeOH (9:1). II, m. 244-6° (MeOH), is a new compound

L4 ANSWER 11 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1970:118226 CAPLUS

DOCUMENT NUMBER: 72:118226

TITLE: Insect molting hormones from *Polypodium* vulgare

PATENT ASSIGNEE(S): Ceskoslovenska Akademie Ved

SOURCE: Brit., 3pp.  
CODEN: BRXXAA

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 1175483		19691223	GB	
CZ 137395			CZ	
DE 1643864			DE	
PRIORITY APPLN. INFO.:			CS	19670209

GI For diagram(s), see printed CA Issue.

AB Ecdysterone (Ia) and 5  $\beta$ -hydroxyecdysterone (Ib) were isolated. Thus dried and ground **rhizomes** of *P. vulgare* were exhaustively **extracted** with EtOH, the solvent evaporated under reduced pressure, and the residual syrup (92 g) diluted with 400 ml H2O. The resulting mixture was washed exhaustively with petroleum ether, the aqueous solution diluted with an

equal volume of MeOH and **extracted** with 5-8 portions of a n equal volume of n-BuOH or with 10 l. of CHCl<sub>3</sub>. The BuOH or CHCl<sub>3</sub> **extract** was evaporated to dryness and the residue chromatographed on a polyamide column with 500 ml fractions of H<sub>2</sub>O as eluent to give a mixture of Ia and Ib. The mixture (5.5 g) in Me<sub>2</sub>CO was chromatographed again on a column of silica gel (250 g, H<sub>2</sub>O content 15%) eluted with Me<sub>2</sub>CO or CHCl<sub>3</sub>-MeOH (9:1) to give 2 g Ia, m. 243-7° (Me<sub>2</sub>CO), Ia. 3H<sub>2</sub>O, m. 151° (H<sub>2</sub>O) and 0.37 g Ib, m. 244-6° (MeOH).

L4 ANSWER 12 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1967:479631 CAPLUS  
DOCUMENT NUMBER: 67:79631  
TITLE: Plant substances. XXVI. Isolation of constituents of common polypody **rhizomes**  
AUTHOR(S): Jizba, Josef; Herout, Vlastimil  
CORPORATE SOURCE: Ceskoslov. Akad. Ved., Prague, Czech.  
SOURCE: Collection of Czechoslovak Chemical Communications (1967), 32(8), 2867-74  
CODEN: CCCCAK; ISSN: 0010-0765  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB cf. CA 64: 2455h. The following compds. were isolated from the hydrophilic part of the EtOH **extract** of the **rhizomes** of **Polypodium vulgare**: sucrose, polypodine A (I), m. 150-1°, [α]<sub>20D</sub> + 61.8° (c 0.19, MeOH), polypodine B, m. 244-6°, [α]<sub>20D</sub> + 92.8° (c 0.18, MeOH), glucocaffeic acid, m. 133-5°, [α]<sub>20D</sub> -80.4°, polydine, m. 191-3°, [α]<sub>20D</sub> -121.6° (c 0.24, MeOH), osladine, m. 201-3°, samambaine, m. 251-2°, and 2 saponins, m. 199-201° and 213-14°, resp. I is identical with crustecdysone (CA 67: 18149y). The lipophilic part of the **extract** contained fernene.

L4 ANSWER 13 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1967:52936 CAPLUS  
DOCUMENT NUMBER: 66:52936  
TITLE: Presence of glycyrrhizinic acid in **rhizomes** of **Polypodium vulgare** collected in Netherlands  
AUTHOR(S): Van der Vijver, L. M.; Uffellie, O. F.  
CORPORATE SOURCE: State Univ., Utrecht, Neth.  
SOURCE: Pharmaceutisch Weekblad (1966), 101(51-52), 1137-9  
CODEN: PHWEAW; ISSN: 0031-6911  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB **Rhizomes** of the fern, *P. vulgare*, were gathered in the Netherlands during September. **Exts.** were made from fresh and dried samples. Thin-layer chromatog. and spectrophotometry, failed to detect any glycyrrhizinic acid present in the precipitate from the **exts**

L4 ANSWER 14 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1966:75920 CAPLUS  
DOCUMENT NUMBER: 64:75920  
ORIGINAL REFERENCE NO.: 64:14228a-c  
TITLE: Triterpenoid epoxide from **Polypodium vulgare**  
AUTHOR(S): Berti, G.; Bottari, F.; Marsili, A.; Morelli, I.  
CORPORATE SOURCE: Univ. Pisa, Italy  
SOURCE: Tetrahedron Letters (1966), (9), 979-82  
CODEN: TELEAY; ISSN: 0040-4039  
DOCUMENT TYPE: Journal  
LANGUAGE: English

GI For diagram(s), see printed CA Issue.

AB cf. CA 62, 5135d. Chromatography of the nonsaponifiable fraction of the petr. ether **extract** from the dry **rhizomes** of *P. vulgare*

on neutral Al<sub>2</sub>O<sub>3</sub> (activity II) and elution with petr. ether gave in succession 9(11)-fernene, 22-hopene, and a new compound (I), m. 268-70°, [α]<sub>D</sub> 28D 47° (CHCl<sub>3</sub>), no color with C(NO<sub>2</sub>)<sub>4</sub>, and no CO or OH bands in the ir spectrum. I treated with alc. HCl gave a heteroannular conjugated diene (II), m. 155-70°, [α]<sub>D</sub> 20D 80° (CHCl<sub>3</sub>). I was recovered unchanged after refluxing 6 hrs. with LiAlH<sub>4</sub> in Et<sub>2</sub>O. These data indicated the presence of an indented tetrasubstituted epoxide. II hydrogenated over Pt-C rapidly gave an alkene, changed more slowly to 17(21)-hopene (III), indicating the formulation of II as shown. III treated with p-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>CO<sub>3</sub>H in CHCl<sub>3</sub> yielded 80% I, tentatively considered as the β-epoxide. I treated with BF<sub>3</sub>-Et<sub>2</sub>O gave a different diene, m. 167-8°, [α]<sub>D</sub> 20D 51°, together with 10% of a ketone, m. 266-72° [α]<sub>D</sub> 20D 53°.

L4 ANSWER 15 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1965:29100 CAPLUS  
DOCUMENT NUMBER: 62:29100  
ORIGINAL REFERENCE NO.: 62:5135d-g  
TITLE: Cyclolanostanic triterpenes isolated from ferns  
AUTHOR(S): Berti, Giancarlo; Bottari, Francesco; Macchia, Bruno; Marsili, Antonio; Ourisson, Guy; Piotrowska, Hanna  
CORPORATE SOURCE: Inst. Chim., Strasbourg  
SOURCE: Bulletin de la Societe Chimique de France (1964), (9), 2359-60  
CODEN: BSCFAS; ISSN: 0037-8968  
DOCUMENT TYPE: Journal  
LANGUAGE: French

AB **Polypodium** vulgare roots (rhizoma), when **extracted** by petr. ether, yielded 10% oil, which was then treated with a NaOH-EtOH solution, giving 30% nonhydrolyzed residue. During chromatography of the residue on Al<sub>2</sub>O<sub>3</sub>, petr. ether eluted 12% of the hydrocarbons, mainly fernene; petr. ether-C<sub>6</sub>H<sub>6</sub> 47% of the unsatd. alcs. The rechromatography of the last fraction on Al<sub>2</sub>O<sub>3</sub> or better as acetates on SiO<sub>2</sub> followed by crystallization of their benzoates yielded 2 components: cyclolaudenol. (I), m. 123-5°, [α]<sub>D</sub> +45°, and its 4-methyl homolog (II), m. 139-40°, [α]<sub>D</sub> +44°, 3-acetate, m. 108-10°, 3-benzoate, m. 164-6°, [α]<sub>D</sub> +64° [Δ<sub>E</sub>290 + 0.91], 3-keto derivs., m. 129-30°. Data for the corresponding derivs. of I are also given. By mass spectroscopy and elemental analysis, the comps. C<sub>31</sub>H<sub>52</sub>O for I and C<sub>30</sub>H<sub>50</sub>O for II were found. Addnl. data were obtained for both alcs. from ir and N.M.R. spectra relative to the appearance of isopropylene group. The reaction of the benzylidene derivative of II, m. 65-75°, with MeI and tert-BuOK, which yielded the benzylidene derivative of I, m. 110-25°, shows the absence of a Me group on C<sub>4</sub> in II in comparison with I. Besides I and II, 2 other unsatd. alcs. were found. The presence of cyclolaudenol in 2 other ferns (*Ceterach officinarum* and *Phyllitis scolopendrium*) is announced. A plant material called balatol obtained by Cocker and Shaw CA 58, 6873c was also examined and found to be mainly a mixture of I and II.

L4 ANSWER 16 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1934:23731 CAPLUS  
DOCUMENT NUMBER: 28:23731  
ORIGINAL REFERENCE NO.: 28:2847b-f  
TITLE: Licorice fern and wild licorice as substitutes for licorice  
AUTHOR(S): Fischer, Louis; Lynn, E. V.  
SOURCE: Journal of the American Pharmaceutical Association (1912-1977) (1933), 22, 1225-30  
CODEN: JPHAA3; ISSN: 0003-0465  
DOCUMENT TYPE: Journal  
LANGUAGE: Unavailable

AB This is a continuation of studies on licorice fern **Polypodium** vulgare L. var. *occidentalis* Hoak. (C. A. 25, 4087) and a new study of

wild licorice *Glycyrrhiza lepidota* (Nutt) Pursh. Material was identified by G. N. Jones. Licorice fern **rhizomes** (A) and leaves (B) were collected near Seattle, Wash. and wild licorice **rhizome** (C) near The Dalles, O. in June, 1929. Loss in air was (A) 75.6, (B) 74.4 and (C) 59.0%. Loss at 110° was (A) 79.2, (B) 77.1 and (C) 59.9%. The cleaned and air-dried material was used. Total ash was (A) 2.7, (B) 6.2 and (C) 5.2%. Acid-insol. ash was (A) 0.27, (B) 0.08 and (C) 0.55%. Et2O-soluble **extract** was (A) 7.3 and (C) 1.67%. CHCl3-soluble **extract** was (A) 7.7 and (C) 1.75%. EtOAc-soluble **extract** was (A) 15.6 and (C) 3.7%. EtOH-soluble **extract** was (A) 35.8 and (C) 14.3%. H2O-soluble **extract** was (A) 41.2 and (C) 27.9%. Reducing sugars were (A) 4.2, (B) 17.0 and (C) 2.3%. Sucrose was (A) 15.5, (B) 0.66 and (C) 3.64%. Starch was (A) 6.3 and (C) 3.5%. Pentosans (A. O. A. C.) were (A) 7.75 and (C) 14.6%. N + 6.25 was (A) 9%. Tannin was (A) 2.5%. Alkaloids were absent in each. Glycyrrhizin, Housemann's method (C. A. 15, 1959) (real licorice), was 7.89 and (C) 8.39%. The residues from (A) and (C) were not sweet. The Tschirch and Cedarberg method gave the characteristic sweet acid from genuine licorice but not for (A) and (C). Hence it was concluded that neither of the plants contained genuine glycyrrhizin. Benzoic and salicylic acids were obtained from (B); also a phytosterol m. 132-3° and an unidentified substance m. 74°. A new glucoside polydin was isolated from (A). It had no effect when fed to a rat. If previously **extracted** with CHCl3 prepns. of (A) might be used in medicine in place of genuine licorice. Licorice fern may be cultivated.

L4 ANSWER 17 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1931:36351 CAPLUS  
DOCUMENT NUMBER: 25:36351  
ORIGINAL REFERENCE NO.: 25:4087i,4088a-b  
TITLE: **Polypodium occidentale**  
AUTHOR(S): Fischer, Louis J.; Goodrich, F. J.  
SOURCE: Journal of the American Pharmaceutical Association  
(1912-1977) (1930), 19, 1063-71  
CODEN: JPHAA3; ISSN: 0003-0465  
DOCUMENT TYPE: Journal  
LANGUAGE: Unavailable

AB The licorice fern, **Polypodium occidentale**, is abundant along the northwest American coast from California to Alaska. The **rhizomes** were collected during 1927 and 1928 and dried at 75°. They were then ground and tested by the A. O. A. C. methods: loss in air 75.44-75.81, loss at 110° 3.48-3.60, total volatile matter 78.92-79.41, ash 2.68-2.69, acid-insol. ash 0.26-0.28 and water-insol. ash 2.06-2.09%. The drug was **extracted** with various organic solvents and the results recorded. The amount **extracted** by water was 41.34-41.04%. Glucose or levulose and starch were present. The amount of pentosans was 6.39-6.05, of tannins 3.45-3.89 and of volatile oil 0.0005% by steam distillation. The coloring matter was isolated. It dyed silk a fast pale yellow but had no effect on cotton or wool. Glycyrrhizin was present to the extent of 2.36% (on dried **rhizome**). Ammoniated glycyrrhizin was prepared; its chemical reactions agreed with those of the same product from *glycyrrhiza* but its color and taste were not identical. Various pharmaceutical prepns. were made and compared with the analogous preparation from licorice. These prepns. were not the equal of the official preparation; most of them had a bitter taste. The **rhizome** contains a starch-splitting enzyme. A fluidext. of the **rhizome** was not toxic to rats.

L4 ANSWER 18 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1925:17435 CAPLUS  
DOCUMENT NUMBER: 19:17435  
ORIGINAL REFERENCE NO.: 19:2259e-g  
TITLE: **Polypodium vulgare**, L  
AUTHOR(S): Volmar, J.; Reeb, E.

SOURCE: Journal de Pharmacie d'Alsace et de Lorraine (1924),  
51, 190-3  
CODEN: JPHLA2

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB The rhizome of Polypodium owes its cholagog action  
(Leclerc, L'Union pharm. 1921, 137) to a glucoside, polypodin. From 500  
g. of rhizome remove glycyrrhizin (A) by cold aqueous maceration for  
48 hrs., then boil with 1 l. H2O for 1 hr., cool, filter and evaporate to 500  
cc., precipitate the remainder of A with 1: 5 H2SO4, again filter, saturate  
with  
NH4-OH and evaporate to dryness. Take up with 150 cc. of H2O, add 100 g.  
(NH4)2SO4 and warm to complete solution of the salt; filter the precipitate  
formed,  
wash it with a cold saturated solution of the salt, and extract with EtOH.  
Evaporate the alc. solution to dryness, and treat with H2O. An insol. brown  
resin is left, soluble in dilute alkali. Treat the aqueous solution with  
Pb(AcO)2,  
remove Pb with H2S, expose to air for 48 hrs., filter and evaporate to  
crystallization  
Polypodin forms yellowish plates, m. 151°-152°, soluble in H2O  
and organic solvents. It is a bitter, sapogenetic glucoside, free from N.  
Several color tests are given.

=> d his

(FILE 'HOME' ENTERED AT 07:47:12 ON 17 MAR 2006)

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, ANTE, AQUALINE,  
AQUASCI, BIOENG, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CAPLUS,  
CEABA-VTB, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DISSABS, DRUGB,  
DRUGMONOG2, DRUGU, EMBAL, EMBASE, ...' ENTERED AT 07:47:23 ON 17 MAR 2006  
SEA (POLYPODIUM) AND (EXTRACT###)

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3	FILE ADISNEWS
8	FILE AGRICOLA
1	FILE ANABSTR
55	FILE BIOSIS
6	FILE BIOTECHABS
6	FILE BIOTECHDS
10	FILE BIOTECHNO
35	FILE CABA
80	FILE CAPLUS
1	FILE CONFSCI
1	FILE CROPB
5	FILE CROPU
1	FILE DDFB
26	FILE DDFU
3	FILE DISSABS
1	FILE DRUGB
8	FILE DRUGMONOG2
31	FILE DRUGU
1	FILE EMBAL
66	FILE EMBASE
20	FILE ESBIODBASE
2	FILE FROSTI
2	FILE FSTA
6	FILE IFIPAT
6	FILE IMSPRODUCT
3	FILE KOSMET
3	FILE LIFESCI
24	FILE MEDLINE
25	FILE PASCAL
1	FILE PROMT

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      43  FILE SCISEARCH
      15  FILE TOXCENTER
      36  FILE USPATFULL
       2  FILE USPAT2
      24  FILE WPIDS
      24  FILE WPINDEX
L1      QUE (POLYPODIUM) AND (EXTRACT###)
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      FILE 'CAPLUS' ENTERED AT 07:48:46 ON 17 MAR 2006
L2      80 S (POLYPODIUM) AND (EXTRACT###)
L3      80 DUP REM L2 (0 DUPLICATES REMOVED)
L4      18 S L2 AND (RHIZOME)

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=> s l1 and (lactic acid or citric acid)
      272 POLYPODIUM
      249487 EXTRACT###
      303742 EXT
      222957 EXTS
      469821 EXT
            (EXT OR EXTS)
      351673 EXTD
           7 EXTDS
      351675 EXTD
            (EXTD OR EXTDS)
      54521 EXTG
           1 EXTGS
      54522 EXTG
            (EXTG OR EXTGS)
      390924 EXTN
           14030 EXTNS
      396438 EXTN
            (EXTN OR EXTNS)
      1063079 EXTRACT###
            (EXTRACT### OR EXT OR EXTD OR EXTG OR EXTN)
           95849 LACTIC
                26 LACTICS
           95858 LACTIC
            (LACTIC OR LACTICS)
      4115614 ACID
      1514498 ACIDS
      4603322 ACID
            (ACID OR ACIDS)
           81614 LACTIC ACID
                (LACTIC(W)ACID)
           80635 CITRIC
                2 CITRICS
           80637 CITRIC
            (CITRIC OR CITRICS)
      4115614 ACID
      1514498 ACIDS
      4603322 ACID
            (ACID OR ACIDS)
           76079 CITRIC ACID
                (CITRIC(W)ACID)
L5      0 L1 AND (LACTIC ACID OR CITRIC ACID)

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=> s l1 and acid
      272 POLYPODIUM
      249487 EXTRACT###
      303742 EXT
      222957 EXTS
      469821 EXT
            (EXT OR EXTS)
      351673 EXTD

```

7 EXTDS  
 351675 EXT D  
 (EXTD OR EXTDS)  
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 1 EXTGS  
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 390924 EXTN  
 14030 EXTNS  
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 (EXTN OR EXTNS)  
 1063079 EXTRACT###  
 (EXTRACT### OR EXT OR EXTD OR EXTG OR EXTN)  
 4115614 ACID  
 1514498 ACIDS  
 4603322 ACID  
 (ACID OR ACIDS)

L6 29 L1 AND ACID

=> d scan

L6 29 ANSWERS CAPLUS COPYRIGHT 2006 ACS on STN  
 IC ICM A61K031-70  
 CC 1-7 (Pharmacology)  
 Section cross-reference(s): 11, 63  
 TI Sulfoquinovosyldiacylglycerols (SQDG) for treatment of inflammatory skin disorders  
 ST **Polypodium** sulfoquinovosyldiacylglycerol antiinflammatory skin  
 IT **Polypodium** decumanum  
 (and Calaguala **extract**; sulfoquinovosyldiacylglycerols for treatment of inflammatory skin disorders, and isolation from **Polypodium** decumanum)  
 IT Dermatitis  
 (atopic; sulfoquinovosyldiacylglycerols for treatment of inflammatory skin disorders)  
 IT Drug delivery systems  
 Drug delivery systems  
 (emulsions, oral; sulfoquinovosyldiacylglycerols for treatment of inflammatory skin disorders)  
 IT Drug delivery systems  
 (enteric; sulfoquinovosyldiacylglycerols for treatment of inflammatory skin disorders)  
 IT Drug delivery systems  
 (parenterals; sulfoquinovosyldiacylglycerols for treatment of inflammatory skin disorders)  
 IT Fatty **acids**, biological studies  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (polyunsatd.; sulfoquinovosyldiacylglycerols, and combinations with polyunsatd. fatty **acids**, for treatment of inflammatory skin disorders)  
 IT Proliferation inhibition  
 (proliferation inhibitors; sulfoquinovosyldiacylglycerols for treatment of inflammatory skin disorders)  
 IT Drug delivery systems  
 (rectal; sulfoquinovosyldiacylglycerols for treatment of inflammatory skin disorders)  
 IT Diglycerides  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (sulfoquinovosyl; sulfoquinovosyldiacylglycerols for treatment of inflammatory skin disorders)  
 IT Anti-inflammatory agents

Cytotoxic agents

Dermatitis

Drug delivery systems

Psoriasis

Urticaria

(sulfoquinovosyldiacylglycerols for treatment of inflammatory skin disorders)

IT Platelet-activating factor receptors

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(sulfoquinovosyldiacylglycerols for treatment of inflammatory skin disorders)

IT Drug delivery systems

(topical; sulfoquinovosyldiacylglycerols for treatment of inflammatory skin disorders)

IT 65154-06-5, Platelet-activating factor

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(sulfoquinovosyldiacylglycerols for treatment of inflammatory skin disorders)

IT 199531-44-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(sulfoquinovosyldiacylglycerols for treatment of inflammatory skin disorders)

IT 199281-23-7 199281-23-7D, acyl derivs.

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(sulfoquinovosyldiacylglycerols for treatment of inflammatory skin disorders)

IT 60-33-3, Linoleic acid, biological studies 463-40-1

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(sulfoquinovosyldiacylglycerols, and combinations with polyunsatd. fatty acids, for treatment of inflammatory skin disorders)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> s ll and citric acid

272 POLYPODIUM

249487 EXTRACT###

303742 EXT

222957 EXTs

469821 EXT

(EXT OR EXTs)

351673 EXTd

7 EXTDS

351675 EXTd

(EXTd OR EXTDS)

54521 EXTg

1 EXTGS

54522 EXTg

(EXTg OR EXTGS)

390924 EXTn

14030 EXTNS

396438 EXTn

(EXTn OR EXTNS)

1063079 EXTRACT###

(EXTRACT### OR EXT OR EXTd OR EXTg OR EXTn)

80635 CITRIC

2 CITRICS

80637 CITRIC

```

(CITRIC OR CITRICS)
4115614 ACID
1514498 ACIDS
4603322 ACID
      (ACID OR ACIDS)
      76079 CITRIC ACID
      (CITRIC(W)ACID)
L7      0 L1 AND CITRIC ACID

=> s l1 and fumaric acid
      272 POLYPODIUM
      249487 EXTRACT###
      303742 EXT
      222957 EXTS
      469821 EXT
      (EXT OR EXTS)
      351673 EXTD
      7 EXTDS
      351675 EXTD
      (EXTD OR EXTDS)
      54521 EXTG
      1 EXTGS
      54522 EXTG
      (EXTG OR EXTGS)
      390924 EXTN
      14030 EXTNS
      396438 EXTN
      (EXTN OR EXTNS)
      1063079 EXTRACT###
      (EXTRACT### OR EXT OR EXTD OR EXTG OR EXTN)
      20750 FUMARIC
      1 FUMARICS
      20750 FUMARIC
      (FUMARIC OR FUMARICS)
      4115614 ACID
      1514498 ACIDS
      4603322 ACID
      (ACID OR ACIDS)
      18746 FUMARIC ACID
      (FUMARIC(W)ACID)
L8      0 L1 AND FUMARIC ACID

=> s l1 and quinic acid
      272 POLYPODIUM
      249487 EXTRACT###
      303742 EXT
      222957 EXTS
      469821 EXT
      (EXT OR EXTS)
      351673 EXTD
      7 EXTDS
      351675 EXTD
      (EXTD OR EXTDS)
      54521 EXTG
      1 EXTGS
      54522 EXTG
      (EXTG OR EXTGS)
      390924 EXTN
      14030 EXTNS
      396438 EXTN
      (EXTN OR EXTNS)
      1063079 EXTRACT###
      (EXTRACT### OR EXT OR EXTD OR EXTG OR EXTN)
      2241 QUINIC
      4115614 ACID

```

1514498 ACIDS  
4603322 ACID  
    (ACID OR ACIDS)  
    2010 QUINIC ACID  
        (QUINIC(W)ACID)  
L9           0 L1 AND QUINIC ACID

=> s l1 and malic acid  
    272 POLYPODIUM  
    249487 EXTRACT###  
    303742 EXT  
    222957 EXTS  
    469821 EXT  
        (EXT OR EXTS)  
    351673 EXTD  
        7 EXTDS  
    351675 EXTD  
        (EXTD OR EXTDS)  
    54521 EXTG  
        1 EXTGS  
    54522 EXTG  
        (EXTG OR EXTGS)  
    390924 EXTN  
    14030 EXTNS  
    396438 EXTN  
        (EXTN OR EXTNS)  
1063079 EXTRACT###  
    (EXTRACT### OR EXT OR EXTD OR EXTG OR EXTN)  
    30805 MALIC  
    4115614 ACID  
    1514498 ACIDS  
    4603322 ACID  
        (ACID OR ACIDS)  
    21629 MALIC ACID  
        (MALIC(W)ACID)  
L10           0 L1 AND MALIC ACID

=> s fern near extract###  
    3098 FERN  
    1655 FERNS  
    3841 FERN  
        (FERN OR FERNS)  
    543242 NEAR  
        323 NEARS  
    543522 NEAR  
        (NEAR OR NEARS)  
    249487 EXTRACT###  
    303742 EXT  
    222957 EXTS  
    469821 EXT  
        (EXT OR EXTS)  
    351673 EXTD  
        7 EXTDS  
    351675 EXTD  
        (EXTD OR EXTDS)  
    54521 EXTG  
        1 EXTGS  
    54522 EXTG  
        (EXTG OR EXTGS)  
    390924 EXTN  
    14030 EXTNS  
    396438 EXTN  
        (EXTN OR EXTNS)  
1063079 EXTRACT###  
    (EXTRACT### OR EXT OR EXTD OR EXTG OR EXTN)

```

L11          0 FERN NEAR EXTRACT###
              (FERN(W) NEAR(W) EXTRACT###)

=> s fern same extract###
    3098 FERN
    1655 FERNS
    3841 FERN
        (FERN OR FERNS)
1412634 SAME
    64 SAMES
1412694 SAME
        (SAME OR SAMES)
    249487 EXTRACT###
    303742 EXT
    222957 EXTS
    469821 EXT
        (EXT OR EXTS)
    351673 EXTD
    7 EXTDS
    351675 EXTD
        (EXTD OR EXTDS)
    54521 EXTG
    1 EXTGS
    54522 EXTG
        (EXTG OR EXTGS)
    390924 EXTN
    14030 EXTNS
    396438 EXTN
        (EXTN OR EXTNS)
1063079 EXTRACT###
        (EXTRACT### OR EXT OR EXTD OR EXTG OR EXTN)
L12          0 FERN SAME EXTRACT###
              (FERN(W) SAME(W) EXTRACT###)

=> s fern and extract###
    3098 FERN
    1655 FERNS
    3841 FERN
        (FERN OR FERNS)
    249487 EXTRACT###
    303742 EXT
    222957 EXTS
    469821 EXT
        (EXT OR EXTS)
    351673 EXTD
    7 EXTDS
    351675 EXTD
        (EXTD OR EXTDS)
    54521 EXTG
    1 EXTGS
    54522 EXTG
        (EXTG OR EXTGS)
    390924 EXTN
    14030 EXTNS
    396438 EXTN
        (EXTN OR EXTNS)
1063079 EXTRACT###
        (EXTRACT### OR EXT OR EXTD OR EXTG OR EXTN)
L13          692 FERN AND EXTRACT###

=> s l13 and (rhizome or root)
    4519 RHIZOME
    4561 RHIZOMES
    7449 RHIZOME
        (RHIZOME OR RHIZOMES)

```

```

159750 ROOT
93284 ROOTS
205341 ROOT
      (ROOT OR ROOTS)
L14      131 L13 AND (RHIZOME OR ROOT)

=> dup rem
ENTER L# LIST OR (END):114
PROCESSING COMPLETED FOR L14
L15      131 DUP REM L14 (0 DUPLICATES REMOVED)

=> d scan

L15      131 ANSWERS  CAPLUS  COPYRIGHT 2006 ACS on STN
CC      11-1 (Plant Biochemistry)
      Section cross-reference(s): 1
TI      The histamine releasing activity of bracken fern.  II.
      Demonstration of glucosides in the active extract
ST      glucoside bracken fern; glycoside bracken fern
IT      Mast cell
      (histamine-induced release from, by bracken fern
      extractive)
IT      Bracken
      (histamine-releasing compound from)
IT      Amino acids, biological studies
      Glycosides
      Sugars, biological studies
      RL: BOC (Biological occurrence); BSU (Biological study, unclassified);
      BIOL (Biological study); OCCU (Occurrence)
      (of bracken fern)
IT      51-45-6, biological studies
      RL: BIOL (Biological study)
      (release of, bracken fern extractive induction of)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> s (polypodium leucotomos) and (root or rhizome)
      272 POLYPODIUM
      33 LEUCOTOMOS
      32 POLYPODIUM LEUCOTOMOS
      (POLYPODIUM(W) LEUCOTOMOS)
159750 ROOT
93284 ROOTS
205341 ROOT
      (ROOT OR ROOTS)
      4519 RHIZOME
      4561 RHIZOMES
      7449 RHIZOME
      (RHIZOME OR RHIZOMES)
L16      7 (POLYPODIUM LEUCOTOMOS) AND (ROOT OR RHIZOME)

=> d total ibib abd
'ABD' IS NOT A VALID FORMAT FOR FILE 'CAPLUS'

The following are valid formats:

ABS ----- GI and AB
ALL ----- BIB, AB, IND, RE
APPS ----- AI, PRAI
BIB ----- AN, plus Bibliographic Data and PI table (default)
CAN ----- List of CA abstract numbers without answer numbers
CBIB ----- AN, plus Compressed Bibliographic Data
CLASS ----- IPC, NCL, ECLA, FTERM
DALL ----- ALL, delimited (end of each field identified)
DMAX ----- MAX, delimited for post-processing

```

FAM ----- AN, PI and PRAI in table, plus Patent Family data  
 FBIB ----- AN, BIB, plus Patent FAM  
 IND ----- Indexing data  
 IPC ----- International Patent Classifications  
 MAX ----- ALL, plus Patent FAM, RE  
 PATS ----- PI, SO  
 SAM ----- CC, SX, TI, ST, IT  
 SCAN ----- CC, SX, TI, ST, IT (random display, no answer numbers;  
 SCAN must be entered on the same line as the DISPLAY,  
 e.g., D SCAN or DISPLAY SCAN)  
 STD ----- BIB, CLASS  
  
 IABS ----- ABS, indented with text labels  
 IALL ----- ALL, indented with text labels  
 IBIB ----- BIB, indented with text labels  
 IMAX ----- MAX, indented with text labels  
 ISTD ----- STD, indented with text labels  
  
 OBIB ----- AN, plus Bibliographic Data (original)  
 OIBIB ----- OBIB, indented with text labels  
  
 SBIB ----- BIB, no citations  
 SIBIB ----- IBIB, no citations  
  
 HIT ----- Fields containing hit terms  
 HITIND ----- IC, ICA, ICI, NCL, CC and index field (ST and IT)  
 containing hit terms  
 HITRN ----- HIT RN and its text modification  
 HITSTR ----- HIT RN, its text modification, its CA index name, and  
 its structure diagram  
 HITSEQ ----- HIT RN, its text modification, its CA index name, its  
 structure diagram, plus NTE and SEQ fields  
 FHITSTR ----- First HIT RN, its text modification, its CA index name, and  
 its structure diagram  
 FHITSEQ ----- First HIT RN, its text modification, its CA index name, its  
 structure diagram, plus NTE and SEQ fields  
 KWIC ----- Hit term plus 20 words on either side  
 OCC ----- Number of occurrence of hit term and field in which it occurs

To display a particular field or fields, enter the display field codes. For a list of the display field codes, enter HELP DFIELDS at an arrow prompt (=>). Examples of formats include: TI; TI,AU; BIB,ST; TI,IND; TI,SO. You may specify the format fields in any order and the information will be displayed in the same order as the format specification.

All of the formats (except for SAM, SCAN, HIT, HITIND, HITRN, HITSTR, FHITSTR, HITSEQ, FHITSEQ, KWIC, and OCC) may be used with DISPLAY ACC to view a specified Accession Number.

ENTER DISPLAY FORMAT (BIB):d total ibib abs  
 'D' IS NOT A VALID FORMAT FOR FILE 'CAPLUS'

The following are valid formats:

ABS ----- GI and AB  
 ALL ----- BIB, AB, IND, RE  
 APPS ----- AI, PRAI  
 BIB ----- AN, plus Bibliographic Data and PI table (default)  
 CAN ----- List of CA abstract numbers without answer numbers  
 CBIB ----- AN, plus Compressed Bibliographic Data  
 CLASS ----- IPC, NCL, ECLA, FTERM  
 DALL ----- ALL, delimited (end of each field identified)  
 DMAX ----- MAX, delimited for post-processing  
 FAM ----- AN, PI and PRAI in table, plus Patent Family data  
 FBIB ----- AN, BIB, plus Patent FAM

IND ----- Indexing data  
 IPC ----- International Patent Classifications  
 MAX ----- ALL, plus Patent FAM, RE  
 PATS ----- PI, SO  
 SAM ----- CC, SX, TI, ST, IT  
 SCAN ----- CC, SX, TI, ST, IT (random display, no answer numbers;  
 SCAN must be entered on the same line as the DISPLAY,  
 e.g., D SCAN or DISPLAY SCAN)  
 STD ----- BIB, CLASS  
  
 IABS ----- ABS, indented with text labels  
 IALL ----- ALL, indented with text labels  
 IBIB ----- BIB, indented with text labels  
 IMAX ----- MAX, indented with text labels  
 ISTD ----- STD, indented with text labels  
  
 OBIB ----- AN, plus Bibliographic Data (original)  
 OIBIB ----- OBIB, indented with text labels  
  
 SBIB ----- BIB, no citations  
 SIBIB ----- IBIB, no citations  
  
 HIT ----- Fields containing hit terms  
 HITIND ----- IC, ICA, ICI, NCL, CC and index field (ST and IT)  
 containing hit terms  
 HITRN ----- HIT RN and its text modification  
 HITSTR ----- HIT RN, its text modification, its CA index name, and  
 its structure diagram  
 HITSEQ ----- HIT RN, its text modification, its CA index name, its  
 structure diagram, plus NTE and SEQ fields  
 FHITSTR ----- First HIT RN, its text modification, its CA index name, and  
 its structure diagram  
 FHITSEQ ----- First HIT RN, its text modification, its CA index name, its  
 structure diagram, plus NTE and SEQ fields  
 KWIC ----- Hit term plus 20 words on either side  
 OCC ----- Number of occurrence of hit term and field in which it occurs

To display a particular field or fields, enter the display field codes. For a list of the display field codes, enter HELP DFIELDS at an arrow prompt (=>). Examples of formats include: TI; TI,AU; BIB,ST; TI,IND; TI,SO. You may specify the format fields in any order and the information will be displayed in the same order as the format specification.

All of the formats (except for SAM, SCAN, HIT, HITIND, HITRN, HITSTR, FHITSTR, HITSEQ, FHITSEQ, KWIC, and OCC) may be used with DISPLAY ACC to view a specified Accession Number.

ENTER DISPLAY FORMAT (BIB):none  
 'NONE' IS NOT A VALID FORMAT FOR FILE 'CAPLUS'

The following are valid formats:

ABS ----- GI and AB  
 ALL ----- BIB, AB, IND, RE  
 APPS ----- AI, PRAI  
 BIB ----- AN, plus Bibliographic Data and PI table (default)  
 CAN ----- List of CA abstract numbers without answer numbers  
 CBIB ----- AN, plus Compressed Bibliographic Data  
 CLASS ----- IPC, NCL, ECLA, FTERM  
 DALL ----- ALL, delimited (end of each field identified)  
 DMAX ----- MAX, delimited for post-processing  
 FAM ----- AN, PI and PRAI in table, plus Patent Family data  
 FBIB ----- AN, BIB, plus Patent FAM  
 IND ----- Indexing data  
 IPC ----- International Patent Classifications

MAX ----- ALL, plus Patent FAM, RE  
 PATS ----- PI, SO  
 SAM ----- CC, SX, TI, ST, IT  
 SCAN ----- CC, SX, TI, ST, IT (random display, no answer numbers;  
                   SCAN must be entered on the same line as the DISPLAY,  
                   e.g., D SCAN or DISPLAY SCAN)  
 STD ----- BIB, CLASS  
  
 IABS ----- ABS, indented with text labels  
 IALL ----- ALL, indented with text labels  
 IBIB ----- BIB, indented with text labels  
 IMAX ----- MAX, indented with text labels  
 ISTD ----- STD, indented with text labels  
  
 OBIB ----- AN, plus Bibliographic Data (original)  
 OIBIB ----- OBIB, indented with text labels  
  
 SBIB ----- BIB, no citations  
 SIBIB ----- IBIB, no citations  
  
 HIT ----- Fields containing hit terms  
 HITIND ----- IC, ICA, ICI, NCL, CC and index field (ST and IT)  
                   containing hit terms  
 HITRN ----- HIT RN and its text modification  
 HITSTR ----- HIT RN, its text modification, its CA index name, and  
                   its structure diagram  
 HITSEQ ----- HIT RN, its text modification, its CA index name, its  
                   structure diagram, plus NTE and SEQ fields  
 FHITSTR ----- First HIT RN, its text modification, its CA index name, and  
                   its structure diagram  
 FHITSEQ ----- First HIT RN, its text modification, its CA index name, its  
                   structure diagram, plus NTE and SEQ fields  
 KWIC ----- Hit term plus 20 words on either side  
 OCC ----- Number of occurrence of hit term and field in which it occurs

To display a particular field or fields, enter the display field codes. For a list of the display field codes, enter HELP DFIELDS at an arrow prompt (=>). Examples of formats include: TI; TI,AU; BIB,ST; TI,IND; TI,SO. You may specify the format fields in any order and the information will be displayed in the same order as the format specification.

All of the formats (except for SAM, SCAN, HIT, HITIND, HITRN, HITSTR, FHITSTR, HITSEQ, FHITSEQ, KWIC, and OCC) may be used with DISPLAY ACC to view a specified Accession Number.  
 ENTER DISPLAY FORMAT (BIB):ibib

L16 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2003:984805 CAPLUS  
 TITLE: Novel therapeutic use of polypodium extracts  
 INVENTOR(S): Quintanilla, Almagro Eliseo  
 PATENT ASSIGNEE(S): Especialidades Farmaceuticas Centrum, S.A., Spain;  
                   Quintanilla Almagro, Eliseo  
 SOURCE: PCT Int. Appl.  
           CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Spanish  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	---	-----	-----	-----
WO 2003103695	A1	20031218	WO 2003-ES272	20030605
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,			

GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,  
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,  
 PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT,  
 TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
 KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,  
 FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,  
 BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

ES 2197018 A1 20031216 ES 2002-1345 20020606  
 ES 2197018 B1 20051001  
 CA 2488356 AA 20031218 CA 2003-2488356 20030605  
 AU 2003240850 A1 20031222 AU 2003-240850 20030605  
 JP 2005528452 T2 20050922 JP 2004-510814 20030605

PRIORITY APPLN. INFO.: ES 2002-1345 A 20020606  
 WO 2003-ES272 W 20030605

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:665288 CAPLUS

DOCUMENT NUMBER: 138:378786

TITLE: Anapsos (*Polypodium leucotomos*)  
 modulates lymphoid cells and the expression of  
 adhesion molecules

AUTHOR(S): Sempere-Ortells, J. M.; Campos, A.; Velasco, I.;  
 Marco, F.; Ramirez-Bosca, A.; Diaz, J.; Pardo, J.  
 CORPORATE SOURCE: Division of Immunology, Department of Biotechnology,  
 University of Alicante, Alicante, Spain

SOURCE: Pharmacological Research (2002), 46(2), 185-190  
 CODEN: PHMREP; ISSN: 1043-6618

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:508244 CAPLUS

TITLE: Utilization of formulations based on water-soluble  
 fractions of *Phlebodium decumanum*(exply-37) and  
*Polypodium leucotomos* as nutritional  
 supplement in the prevention and reversion of  
 excessive physical effort syndrome

INVENTOR(S): Yesares Ferrer, Miguel; De Teresa Galvan, Carlos;  
 Alcaide Garcia, Antonio; Yesares Morillas, Miguel  
 Enrique

PATENT ASSIGNEE(S): Helsint, S.A.L., Spain; Helechos Internacional  
 Honduras, S.A. De C.V.

SOURCE: PCT Int. Appl.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Spanish

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000043022	A1	20000727	WO 2000-ES21	20000120
W: BR, CA, MX, UA, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
ES 2146555	A1	20000801	ES 1999-133	19990122
ES 2146555	B1	20010301		

PRIORITY APPLN. INFO.: ES 1999-133 A 19990122

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1997:146151 CAPLUS  
 DOCUMENT NUMBER: 126:198476  
 TITLE: Effect of Anapsos (*Polypodium leucotomos* extract) on in vitro production of cytokines  
 AUTHOR(S): Sempere, J. M.; Rodrigo, C.; Campos, A.; Villalba, J. F.; Diaz, J.  
 CORPORATE SOURCE: Scientific Dept., ASAC Pharmaceutical International, Alicante, 03006, Spain  
 SOURCE: British Journal of Clinical Pharmacology (1997), 43(1), 85-89  
 CODEN: BCPHBM; ISSN: 0306-5251  
 PUBLISHER: Blackwell  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

L16 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1987:572800 CAPLUS  
 DOCUMENT NUMBER: 107:172800  
 TITLE: Isolation of ecdysones from plants  
 INVENTOR(S): Vargas Gonzalez, Jose  
 PATENT ASSIGNEE(S): Spain  
 SOURCE: Span., 19 pp.  
 CODEN: SPXXAD  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Spanish  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	---	-----	-----	-----
ES 547554	A1	19860316	ES 1985-547554	19851003
PRIORITY APPLN. INFO.:			ES 1985-547554	19851003

L16 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1983:551816 CAPLUS  
 DOCUMENT NUMBER: 99:151816  
 TITLE: Anapsos, an antipsoriatic drug which increases the proportion of suppressor cells in human peripheral blood  
 AUTHOR(S): Vargas, J.; Munoz, C.; Osorio, C.; Garcia-Olivares, E.  
 CORPORATE SOURCE: Dep. Fisiol. Bioquim., Fac. Med., Granada, Spain  
 SOURCE: Annales d'Immunologie (Paris) (1983), 134C(3), 393-400  
 CODEN: ANIMCZ; ISSN: 0300-4910  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

L16 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1975:603775 CAPLUS  
 DOCUMENT NUMBER: 83:203775  
 TITLE: Triterpenes from *rhizomes* of *Polypodium leucotomos*  
 AUTHOR(S): Horvath, Antonio R.; De Szocs, Joseph; Alvarado, Francisco; Grant, David J. W.  
 CORPORATE SOURCE: Dep. Physiol. Sci., Natl. Auton. Univ. Honduras, Tegucigalpa, Honduras  
 SOURCE: Phytochemistry (Elsevier) (1975), 14(7), 1641-2  
 CODEN: PYTCAS; ISSN: 0031-9422  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

=> FIL STNGUIDE  
COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
208.52	209.95

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
-27.75	-27.75

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FILE 'STNGUIDE' ENTERED AT 08:27:15 ON 17 MAR 2006  
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FILE CONTAINS CURRENT INFORMATION.  
LAST RELOADED: Mar 10, 2006 (20060310/UP).

=> logoff  
ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF  
LOGOFF? (Y)/N/HOLD:n

=> logoff  
ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF  
LOGOFF? (Y)/N/HOLD:y

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
0.72	210.67

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
0.00	-27.75

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STN INTERNATIONAL LOGOFF AT 08:34:14 ON 17 MAR 2006